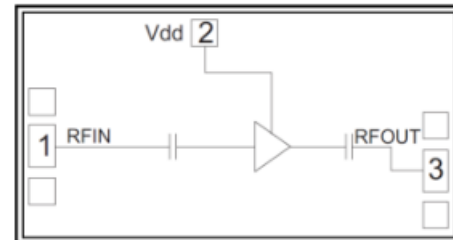


Features

- Single Biasing Voltage (Self Biased)
- Frequency: 2-6GHz
- Small Signal Gain: 23dB
- P1dB: 24dBm
- Psat: 25dBm
- Efficiency: 34% @ Psat
- Power Supply: 5V @ 200mA
- Input/Output: 50Ω
- Die Size: 2.72 x 1.17 x 0.1 mm

Functional Block Diagram

Typical Applications

- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

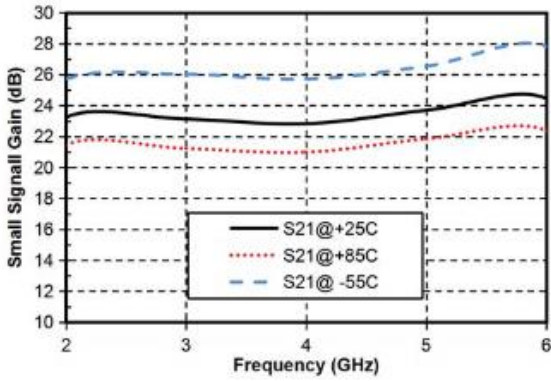
Electrical Specifications

TA = +25°C, Vd = +5V

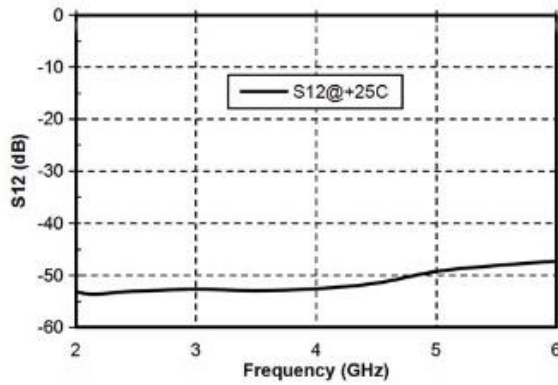
Parameters	Min.	Typ.	Max.	Units
Frequency		2-6		GHz
Small Signal Gain	22	24	24.5	dB
Gain Flatness		±1.25		dB
P1dB	23.5	24	24.5	dBm
Psat	24	25	25.5	dBm
Input Return Loss	13	15		dB
Output Return Loss	9.5	12		dB
Quiescent Current		200		mA



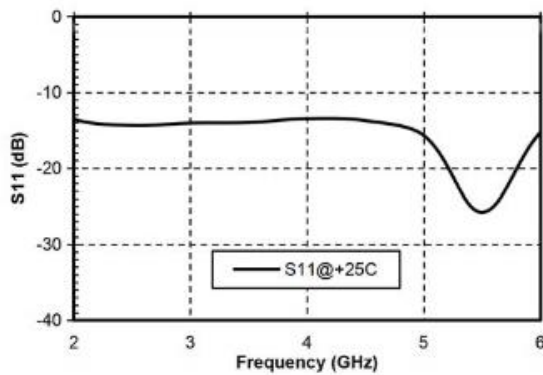
Gain vs. Frequency



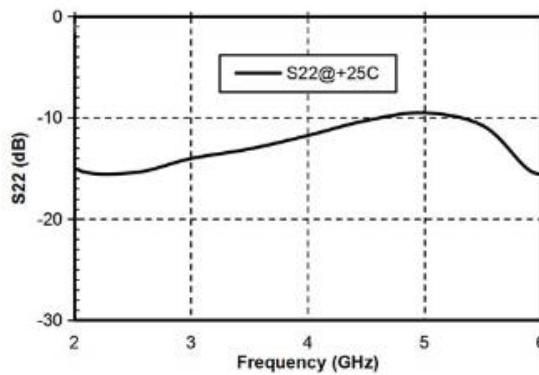
Reverse Isolation vs. Frequency



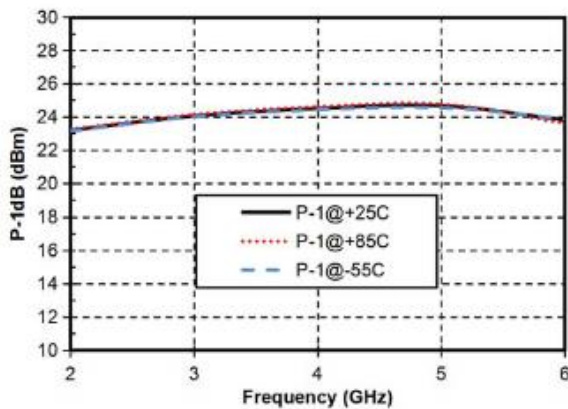
Input Return Loss vs. Frequency



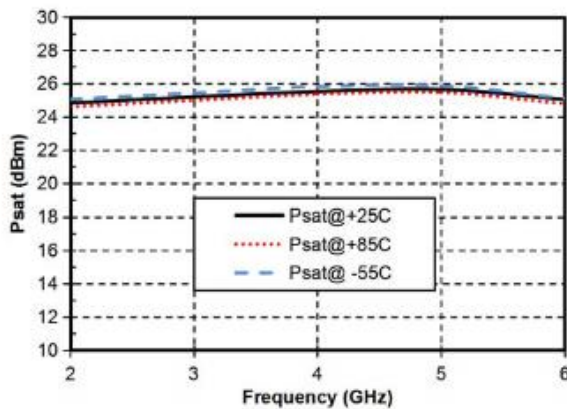
Output Return Loss vs. Frequency



P-1dB vs. Frequency

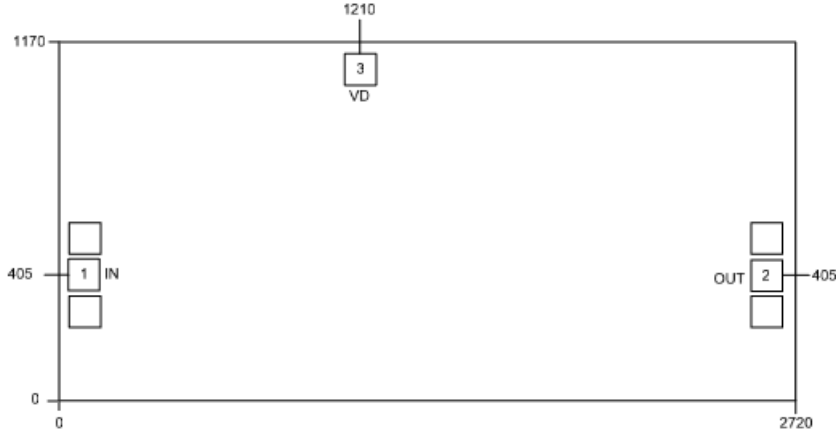


Psat vs. Frequency





Outline Drawing: All Dimensions in μm



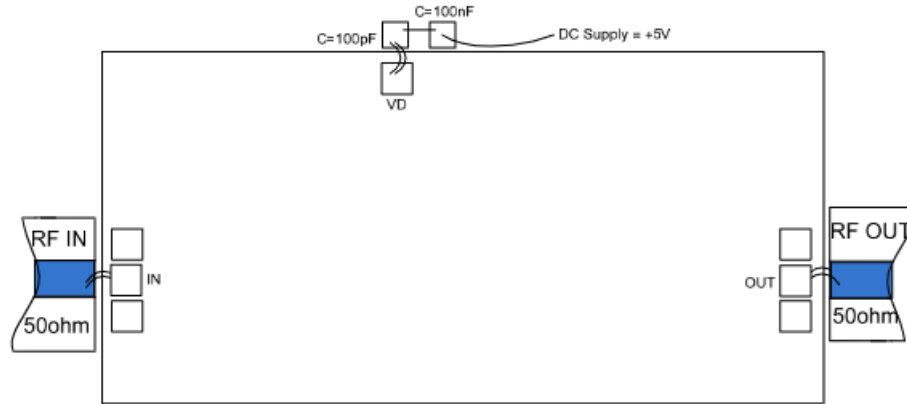
Pad Description

PAD	Function	Description
1	RF IN	RF signal input terminal, no blocking capacitor required
2	RF OUT	RF signal output terminal, no blocking capacitor required
3,4	Vd1, Vd2	Amplifier drain bias, connected to external 100pF, 1000pF 100nF bypass capacitor.
Die Bottom	GND	Die bottom must be connected to RF/DC ground

*Ports 3 and 4 need to be powered on simultaneously



Assembly Drawing



Notes:

1. Die thickness: 100um
2. Typical bond pad is 100*100 μm^2
3. Bond pad metalization: Gold
4. Backside metalization: Gold
5. Backside of the die (GND)
6. No connection required for unlabeled bond pads

Maximum Ratings:

1. Maximum drain voltage: +7V
2. Maximum input power: +20dBm
3. Operating temperature: -55°C to +85°C
4. Storage temperature: -65°C to +150°C